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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,488	04/14/2004	Venkatesh Ganti	301560.01	8552

22971   7590   05/29/2007

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EXAMINER
JOHNSON, JOHNESE T

ART UNIT	PAPER NUMBER
2166	

NOTIFICATION DATE	DELIVERY MODE
05/29/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>5 March 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-34</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to the Amendment filed on 5 March 2007, claims 1-34 are pending.

2.   The previous claim rejections under 35 USC 112 2nd have been withdrawn.

3.   The rejections under 35 USC 101 fo claims 17, 22, and 27 are maintained

because the amendment to the preamble of the claims does not make the claim subject

matter statutory.

Claim Objections

4.   Claim 22 is objected to because of the following informalities: All dependents on

claim 22 should sate "the string segmentation schema" instead of only "The

segmentation schema". Appropriate correction is required.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

6.   Claims 1, 16, 17, 22, and 27 are rejected under 35 U.S.C. 101 because the

claimed invention is directed to non-statutory subject matter.

Claims 1,16, 17, 22, and 27 are directed to software modules/ program code.

Program code is also known as functional descriptive material (See In re Warmerdam,

33 F3d at 1360, 31 USPQ2d at 1759). The content is not structurally and functionally

interrelated to a computer-readable medium thereby rendering it incapable of producing

a useful, concrete and tangible result and is therefore, non-statutory. The claims should

be amended to recite hardware in the **body** of the claims.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

8.   Claims 17, 22, and 27 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use

the invention.

Claims 17, 22, and 27 recite contradictory subject matter to that of

applicant's specification. The claims recite, "wherein the existing collection of data

records does not comprise manually segmented training data". However, in applicant's

specification, page 3, lines 2-6, "the present embodiment...does not require explicitly on

labeled [i.e. segmented] data". The examiner is unable to ascertain what type of

training data the system uses, for example, automatically segmented data,

unsegmented data, or unlabeled data. One of ordinary skill in the art would not know

how to create or use the invention absent further description.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Borkar et al., "Automatic segmentation of text strings into structured records" and in

view of Ando et al., "Mostly-Unsupervised Statistical Segmentation of Japanese

Sequences".

As to claims 1 and 27, Borkar et al. disclose:

A process (see Abstract, pg. 1, line 1) and system (see Abstract, pg. 1, paragraph 2,

line 1; wherein DATAMOLD is a system of interrelated components used to segment

text) to evaluate an input string to segment said input string into component parts

comprising:

means for providing a state transition model (see Abstract, pg. 1, paragraph 2, line 1

        DATAMOLD) based on an existing collection of data records that includes

        probabilities to segment input strings into component parts which adjusts said

probabilities to account for token placement in the input string (see pg. 7, section

2.5.1, lines 16-21);

means for determining a most probable segmentation (see Abstract, pg. 1, paragraph 2,

line 1 DATAMOLD) of the input string by comparing an order of tokens that make

up the input string with a state transition model derived from the collection of data

records (see pg. 3, section 1.3.1, col. 2, lines 9-11; wherein the inner HMMs

corroborate each other's findings to pick the segmentation that is globally

optimal).

means for segmenting the input string into one or more component parts according to

the most probable segmentation (see page 4, col. 2, lines 6-9 and 37-38); and

means for storing the one or more component parts in a data base (see abstract, line 7).

However, Borkar et al. do not explicitly disclose:

wherein the existing collection of data records does not comprise manually segmented

training data.

Ando et al. disclose:

wherein the existing collection of data records does not comprise manually segmented

training data (see abstract, lines 5-9 and page 2, lines 26-30).

It would have been obvious to have modified the teachings of Borkar et al. by the

teachings of Ando et al. to provide a simple, efficient segmentation method thus

avoiding the costs of hand-segmenting (manually segmenting) training data (see Ando

et al., page 2, lines 26-30).

As to claims 2 and 28, Borkar et al., as modified, disclose:

wherein the state transition model has probabilities for multiple states of said model and

a most probable segmentation is determined based on a most probable token emission

path through different states of the state transition model from a beginning state to an

end state (see Borkar et al., pg. 4, col. 1, line 3; wherein the HMM has multiple states

and col. 2, lines 6-9 –path having the highest probability).

As to claims 3 and 29, Borkar et al., as modified, disclose:

means for maintaining a collection of records, wherein the collection of data records is

stored in a database relation and an order of attributes for the database relation as the

most probable segmentation is determined (see Borkar et al., pg. 3, Fig. 1; wherein the

structured record is determined and produced).

As to claims 4 and 30, Borkar et al., as modified, disclose:

wherein the input string is segmented into sub-components which correspond to

attributes of the database relation (see Borkar et al., pg. 1, col. 2, section 1.1, lines 5-

18).

As to claims 5 and 31, Borkar et al., as modified, disclose:

wherein the tokens are substrings of said input string (see Borkar et al., pg. 6, section

2.4, lines 2-4).

As to claims 6 and 32, <u>Borkar et al.</u>, as modified, disclose:

wherein the input string is to be segmented into database attributes and wherein each

attribute has a state transition model based on the contents of the database relation

(see <u>Borkar et al.</u>, pg. 4, Fig. 2; wherein each attribute has a transition in the model).

As to claims 7 and 33, <u>Borkar et al.</u>, as modified, disclose:

wherein the state transition model has multiple states for a beginning, middle and

trailing position within an input string (see <u>Borkar et al.</u>, pg. 6, Fig. 6; wherein state "1" is

the beginning, state "2" is the middle and state "3" is the trailing position).

As to claims 8 and 34, <u>Borkar et al.</u>, as modified, disclose:

wherein the state transition model has probabilities for the states and a most probable

segmentation is determined based on a most probable token emission [state] path

through different states of the state transition model from a beginning state to an end

state (see <u>Borkar et al.</u>, pg. 6, Fig 6 and col. 2, paragraph 2, lines 1-4).

As to claim 9, <u>Borkar et al.</u>, as modified, disclose:

wherein input attribute order for records to be segmented is known in advance of

segmentation of an input string (see <u>Borkar et al.</u>, Abstract, pg. 1, paragraph 2, lines 3-

8).

As to claim 10, <u>Borkar et al.</u>, as modified, disclose:

wherein an attribute order is learned from a batch of records that are inserted into the

table (see <u>Borkar et al.</u>, Abstract, pg. 1, paragraph 2, lines 1-3).

As to claim 11, <u>Borkar et al.</u>, as modified, disclose:

wherein the state transition model has at least some states corresponding to base

tokens occurring in the reference relation (see <u>Borkar et al.</u>, Abstract, pg. 1, paragraph

2, lines 1-8; wherein the training examples and dictionary provide the basis for

acceptable and recognizable input and therefore some states would correspond to the

same structure/ examples or base tokens).

As to claim 12, <u>Borkar et al.</u>, as modified, disclose:

wherein the state transition model has class states corresponding to token patterns

within said reference relation (see <u>Borkar et al.</u>, pg. 3, col. 1, paragraph 3, lines 1-8).

As to claim 13, <u>Borkar et al.</u>, as modified, disclose:

wherein the state transition model includes states that account for missing, misordered

and inserted tokens within an attribute (see <u>Borkar et al.</u>, pgs. 3-4, section 2; wherein

data mold uses the example segmented records to output a model that when presented

with any unseen text segments it into one or more of its constituent elements).

As to claim 15, <u>Borkar et al.</u>, as modified, disclose:

A machine computer readable medium containing instructions to perform the

evaluat[ion] [of] an input string to segment said input string into component parts (see

Borkar et al., pg. 1, section 1.1, lines 5-6; wherein the tool is used during warehouse

construction which implies that the program instructions are being read from a medium

inserted in or stored on a machine).

As to claim 17, Borkar et al. disclose:

   a) a database management system to store records organized into relations

         wherein data records within a relation are organized into a number of

         attributes (see page 1, Abstract, line 7 – corporate database);

   b) a model building component that builds a number of attribute recognition

         models based on an existing relation of data records, wherein one or more

         of said attribute recognition models includes probabilities for segmenting

         input strings into component arts which adjusts said probabilities to

         account for erroneous entries within an input string (see page 1, Abstract,

         lines 13-14; wherein DATAMOLD comprises a model building component

         because its built on HMM; and, (see pg. 7, section 2.5.1, lines 16-21

         accounting for invalid paths); and

   c) a segmenting component that receives an input string and determines a most

         probable record segmentation by evaluating transition probabilities of

         states within the attribute recognition models built by the model building

         component (see page 2, section 1.3, lines 1-3; wherein DATAMOLD

         comprises a segmenting component).

However, Borkar et al. do not explicitly disclose:

wherein the existing collection of data records does not comprise manually segmented

training data.

Ando et al. disclose:

wherein the existing collection of data records does not comprise manually segmented

training data (see abstract, lines 5-9 and page 2, lines 26-30).

It would have been obvious to have modified the teachings of Borkar et al. by the

teachings of Ando et al. to provide a simple, efficient segmentation method thus

avoiding the costs of hand-segmenting (manually segmenting) training data (see Ando

et al., page 2, lines 26-30).

As to claim 18, Borkar et al., as modified, disclose:

wherein the segmenting component receives a batch of evaluation strings and

determines an attribute order of strings in said batch and thereafter assumes the input

string has tokens in the same attribute order as the evaluation strings (see Borkar et al.,

Abstract, pg. 1, paragraph 2, lines 3-8; wherein the training examples are the batch of

strings that provide a basis for the structure of strings).

As to claim 19, Borkar et al., as modified, disclose:

wherein the segmenting component evaluates the tokens in an order in which they are

contained in the input string and considers state transitions from multiple attribute

recognition models to find a maximum probability for the state of a token to provide a

maximum probability for each token in said input string (see Borkar et al., pg. 4, section

2.1; wherein the segmenting component considers transitions from the multiple attribute

states to find the maximum probability).

As to claim 21, Borkar et al., as modified, disclose:

wherein the model building component defines a start and end state for each model and

accommodates missing attributes by assigning a probability for a transition from the

start to the end state (see Borkar et al., pg. 6, Fig. 6).

As to claim 22, Borkar et al. disclose:

a state transition model for a data attribute of a data record wherein the transition model

assigns token probabilities to a beginning, middle and trailing state of the model that are

transitioned to from a start state and terminate with an end state (see Page 6, Fig. 6;

wherein the state transition model has states for attributes of the input record and the

edges represent the probabilities to the first (beginning state), second (middle state),

third (trailing state))

However, Borkar et al. do not explicitly disclose:

wherein the existing collection of data records does not comprise manually segmented

training data.

Ando et al. disclose:

wherein the existing collection of data records does not comprise manually segmented

training data (see abstract, lines 5-9 and page 2, lines 26-30).

It would have been obvious to have modified the teachings of <u>Borkar et al.</u> by the

teachings of <u>Ando et al.</u> to provide a simple, efficient segmentation method thus

avoiding the costs of hand-segmenting (manually segmenting) training data (see <u>Ando</u>

<u>et al.</u>, page 2, lines 26-30).

As to claim 24 <u>Borkar et al.</u>, as modified, disclose:

wherein the schema includes a state transition models for multiple attributes of a

database record and one or more of said models provide a transition probability

between the start state and the end state of each attribute recognition model to

accommodate missing attributes within an input string (see <u>Borkar et al.</u>, pg. 4, figure 2;

wherein the model includes states for each attribute in an input string from a database

record and the edges provide the probabilities between start and end states).

As to claim 25, <u>Borkar et al.</u> disclose:

A process of segmenting a string input record into a sequence of attributes for inclusion

into a database table comprising:

considering a first token in a string input record and determining a maximum state

    probability for said token based on state transition models for multiple data table

    attributes (see pg. 4, section 2.1; wherein the segmenting component considers

    transitions from the multiple attribute states to find the maximum probablility);

considering in turn subsequent tokens in the string input record and determining

    maximum state probabilities for said subsequent tokens from a previous token

state until all tokens are considered (see pg. 4, section 2.1; wherein the

segmenting component considers transitions from the multiple attribute states to

find the maximum probability); and

segmenting the string record by assigning the tokens of the string to attribute states of

the state transition models corresponding to said maximum state probabilities

(see pg. 4, Fig. 2, wherein the model displays attributes represented by states

and section 2.1; wherein the segmenting component considers transitions from

the multiple attribute states to find the maximum probability .

However, Borkar et al. do not explicitly disclose:

wherein the state transition models are based on an existing collection of data records

that does not comprise manually segmented training data.

Ando et al. disclose:

wherein the state transition models are based on an existing collection of data records

(sequences) that does not comprise manually segmented training data (see abstract,

lines 5-9 and page 2, lines 26-30).

It would have been obvious to have modified the teachings of Borkar et al. by the

teachings of Ando et al. to provide a simple, efficient segmentation method thus

avoiding the costs of hand-segmenting (manually segmenting) training data (see Ando

et al., page 2, lines 26-30).

As to claim 26, Borkar et al., as modified, disclose:

additionally comprising determining an attribute order for a batch of string input records

and using the order to limit the possible state probabilities when evaluating tokens in an

input string (see Borkar et al., Abstract, pg. 1, paragraph 2, lines 1-3; wherein the

structure and order] is learned from the training examples).

11.   Claims 14, 20, and 23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Borkar et al.; "Automatic segmentation of text strings into structured

records", in view of Ando et al., "Mostly-Unsupervised Statistical Segmentation of

Japanese Sequences", and further in view of Reed (U.S. Pat. No. 5, 095, 432).

As to claim 14, Borkar et al. and Ando et al., do not explicitly disclose:

wherein the state transition model has a beginning, a middle and a trailing state

topology and the process of accounting for misordered and inserted tokens is performed

by copying states from one of said beginning, middle or trailing states into another of

said beginning, middle or trailing states.

However, Reed discloses:

wherein the state transition model has a beginning, a middle and a trailing state

topology and the process of accounting for misordered and inserted tokens is performed

by copying states from one of said beginning, middle or trailing states into another of

said beginning, middle or trailing states (see col. 5, lines 1).

It would have been obvious, at the time of the invention, having the teachings of

Borkar et al., Ando et al., and Reed before him/her, to combine the steps as disclosed

by Borkar et al. and Ando et al. with the feature as disclosed by Reed to enable

grammar developers to use the familiar PSG formalism to compile their grammars into

RVG for more efficient execution (see Reed, col. 2, lines 54-57).

As to claims 20 and 23, Borkar et al. and Ando et al., do not explicitly disclose:

wherein the model building component assigns states for each attribute for a beginning,

middle and trailing token position (see pg. 4, Fig. 2; wherein the states are assigned to

each attribute and pg. 6, Fig. 6; wherein states are assigned for first (beginning state),

second (middle state), third (trailing state))

However, Borkar et al. does not explicitly disclose:

wherein the model building component relaxes token acceptance by the model by

copying states among said beginning, middle and trailing token positions.

Reed discloses:

wherein the model building component relaxes token acceptance by the model by

copying states among said beginning, middle and trailing token positions (see col. 5,

lines 1; wherein states in the transition model are copied).

It would have been obvious, at the time of the invention, having the teachings of

Borkar et al., Ando et al., and Reed before him/her, to combine the steps as disclosed

by Borkar et al. and Ando et al. with the feature as disclosed by Reed to enable

grammar developers to use the familiar PSG formalism to compile their grammars into

RVG for more efficient execution (see Reed, col. 2, lines 54-57).

12.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Borkar</u>

<u>et al.</u>; "Automatic segmentation of text strings into structured records" in view of <u>Ando</u>

<u>et al.</u>, "Mostly-Unsupervised Statistical Segmentation of Japanese Sequences", and

further in view of <u>Fairweather</u> (U.S. PG. Pub. No. 2006/0235811).

As to claim 16, <u>Borkar et al.</u> disclose:

providing a reference table of string records that are segmented into multiple substrings

        corresponding to database attributes (see Abstract, p. 1, paragraph 2, lines 1-3);

breaking the input record into a sequence of tokens, and determining a most probable

        segmentation of the input record by comparing the tokens of the input record with

        state models derived for attributes from the reference table (see pg. 3, section

        1.3.1, col. 2, lines 9-11; wherein the inner HMMs corroborate each other's

        findings to pick the segmentation that is globally optimal).

However, <u>Borkar et al.</u> does not explicitly disclose:

wherein the reference table of string records does not comprise manually segmented

        training data.

analyzing the substrings within an attribute to provide a state model that assumes a

        beginning, a middle and a trailing token topology for said attribute said topology

        including a null token for an empty attribute component;

<u>Ando et al.</u> disclose:

wherein the reference table of string records (sequences) does not comprise manually

segmented training data. (see abstract, lines 5-9 and page 2, lines 26-30).

It would have been obvious to have modified the teachings of Borkar et al. by the

teachings of Ando et al. to provide a simple, efficient segmentation method thus

avoiding the costs of hand-segmenting (manually segmenting) training data (see Ando

et al., page 2, lines 26-30).

However, Borkar et al. and Ando et al. does not explicitly disclose:

analyzing the substrings within an attribute to provide a state model that assumes a

beginning, a middle and a trailing token topology for said attribute said topology

including a null token for an empty attribute component

Fairweather discloses:

analyzing the substrings within an attribute to provide a state model that assumes a

beginning, a middle and a trailing token topology for said attribute said topology

including a null token for an empty attribute component (see Fairweather,

paragraph [0406], lines 8-9; wherein a the null pointer is returned because the

token is null);

It would have been obvious, at the time of the invention, having the teachings of

Borkar et al., Ando et al., and Fairweather before him/her, to combine the steps as

disclosed by Borkar et al. and Ando et al. with the feature as disclosed by Fairweather

to provide a system in which the content of the data itself actually determines the order

of execution of statements in the mining language and automatically keeps track of the

current state (see Fairweather, paragraph [0004], lines 7-10).

Response to Arguments

13.   Applicant's arguments with respect to claims 1, 14, 16, 17, 20, 22, 23, 25, and 27 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claims 1, 14, 16, 17, 20, 22, 23, 25, and 27, applicant argues that none of the cited references disclose or suggest the element "wherein the existing collection of data records does not comprise manually segmented training data". Applicant's arguments are contradictory to the actual elements of the specification. Applicant argues that the embodiments of the present application are directed to "...unsupervised text segmentation utilizing a reference table or relation that does not require explicitly labeled (i.e., segmented) training data ... (see specification page 3, lines 2-6". The act of not requiring *manually* segmented training data is not the same as not requiring *any* segmented data. The examiner suggests the applicant claim what his specification teaches.

The examiner notes applicant's remarks regarding claim 29. the claimed limitations are similar subject matter to that of claim 3 and are rejected under the same rationale.

Conclusion

14.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

15.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Johnese Johnson whose telephone number is 571-270-

1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

18 May 2007
JJ

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER